which manifests itself in the following forms. 1. The most common form is inflammation of the caruncula lachrymalis and of the semilunar fold of the conjunctiva. On examination, particles of sublimated or triturated sulphur, enveloped in mucus, are found at the inner angle of the eye. 2. A more serious form of the disease is a true conjunctivitis; ordinarily acute, without, however, reaching the suppurative stage. It very rarely produces patches on the cornea or other severe disorders. In unhealthy subjects, the disease assumes a chronic form, takes the characters of tarsal ophthalmia, and produces lippitude and falling off of the eyelashes. 3. A third form is accompanied by subconjunctival ecchymoses. The treatment is preventive and curative. The preventive means consist in the choice of the form of sulphur to be used, in the use of veils or spectacles, and in the employment of hygienic measures after the operation. The curative means are those of ordinary ophthalmia.—*Brit. Med. Jour.*, Sept. 19, 1863, from *Bull. Gén. de Thérap.*, Aug. 30, 1863.

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42. *Reflecting Ophthalmoscope.*—Mr. J. Z. Laurence has lately invented a reflecting ophthalmoscope on the ghost principle, which he exhibited to the Harveian Society of London on the 15th of Oct. last.

Mr. Laurence first showed on the eye of a rabbit that the luminosity of the fundus oculi may be readily observed by interposing a sheet of plate-glass between the eye and a lamp flame. An observer regarding the surface of the glass at the proper angle sees the illuminated pupil. It was then shown that the aerial image formed in the focus of a convex lens may be at once rendered obvious by its reflection from a plate of glass placed beyond the focus of the lens. In this way Mr. Laurence succeeded in demonstrating the optic nerve, retinal, and choroidal vessels of the rabbit's eye by the reflection from a sheet of glass of their real image formed by a convex lens (of two or three inches focus). An ophthalmoscope on this principle consists, then, simply of two parts—(1) of a convex lens, and (2) a plate of glass. In this way Mr. Laurence stated he had observed the minutest details of the human fundus oculi; but, at the same time, he wished to impress on the members of the Society that he had only succeeded in establishing the principle of his instrument, there remaining much to be done in the details of its construction before it would become one of general practical utility. Mr. Laurence then exhibited in a patient a very striking instance of pulsation in the retinal veins, of which, in a less degree, he stated he had latterly observed several other instances since his attention had more especially been directed to the point. With regard to the "reflecting ophthalmoscope," Mr. Laurence stated that it possesses also autophthalmoscopic properties. In the autophthalmoscope of Coccius, also, the perforated mirror might be advantageously replaced by a disk of plate glass.—*Med. Times & Gaz.*, Oct. 31, 1863.

## MIDWIFERY.

43. *Combined External and Internal Version.*—Dr. Braxton Hicks read before the Obstetrical Society of London (November 4, 1863) a paper on this mode of turning, which might be called "bimanual version;" and brought forward twenty cases in which he had operated, including eight cases of placenta prævia, one of accidental hemorrhage, and two in which he had changed arm presentations into cephalic, in both of which the children were born alive. After alluding to the discovery of the mobility of the fœtus made by the Germans, and also to the plan of pushing on the child by one or two fingers through the os, he proceeded to show the mode of combining both movements, by acting on both extremities of the child, with a much greater certainty as to the result in the majority of cases requiring version. He pointed out the principles on which the plan was based, viz., the mobility of the child in utero, varying according to the activity of the uterus; the position of a knee within a short distance of the os, when the child was transverse; the ease with which the breech was

brought to the os with the foot upon it, when the child was already transverse. The movement of the child in utero was accomplished by pressing on one side of the breech at the fundus, in ordinary head presentations, by a series of gentle palpations; or by a gliding pressure on the abdominal parietes, so as to follow up the fœtus as it recedes under the impulse, by continuing of which the breech is brought to the middle of the uterus on one side; at the same time, the head is pushed up by a finger or two through the os, so as to raise it above the brim to the middle of the uterus on the other side. The child being thus more or less transverse, the knee can be generally easily seized; if not, the breech must be depressed to the os, and the foot secured. Dr. Hicks dwelt upon its easy application to placenta prævia, as shown in the cases he recorded; and stated that it was particularly of use in those cases where the os was so little dilated that the hand could not enter. He, however, laid great stress upon the importance of not using any more traction than the weight of the arm could produce, whereby the child was used as a plug, while time was given to rally the patient, for the os to dilate, and for the pains to come on. In almost every case he waited for natural efforts to deliver, only gently assisting. He had in none seen the slightest bleeding, internal or external, after the leg was once fairly through. Dr. Hicks then pointed out the mode of producing cephalic version, which he had found very practicable in certain cases of transverse presentation, by placing the head, already secured between the outside and inside hand, into the os, and retaining the external hand on the head till the uterus had moulded itself to the form of the head and shoulders. He also showed that this mode of pressing the head into the os was a means of restoring prolapse of the funis in some cases, as occurred in two cases recorded by him, and thought it would in similar cases be found to be a satisfactory mode of treatment. Allusion was then made to the advantages of early version, and to the class of cases to which it was applicable. The circumstances that arose to interfere with the plan were pointed out, and the means of combating them. The author remarked, that although in confirmed arm presentations it was scarcely possible to expect this plan to succeed, yet these cases need seldom occur to a vigilant practitioner, as he had the means of avoiding such cases, if called early, by bimanual version. Perhaps the greatest value of this mode is the capability of version long before it can be performed by any other method.

Dr. Hall Davis could from experience bear testimony to the practicability and value of the operation of turning the child by external manipulation, as proposed by Dr. Hicks. He must, however, confess that he had found Dr. Hicks's method most successful when conjoined with the introduction of two fingers of the left hand to hook down the knee, or of the entire hand when the foot could not otherwise be reached. In some cases he had found version by one foot impossible; he had then by bringing down the other foot effected his object with facility. In those cases of placenta prævia in which the patients had lost much blood, and turning was advisable, he thought the method now proposed, with or without the employment of two fingers internally, as circumstances might indicate, particularly valuable; as in these cases, from reflex action being in them more readily set up, the introduction of the hand into the uterus was attended with greater risk. Dr. Davis had in a few cases, to obviate turning, tested the practice of detaching the placenta from the cervix; but the hemorrhage had continued. No fatal result followed, however, as the child was immediately brought down, and acted as a plug upon the bleeding orifices.

Dr. Greenhalgh mentioned a case in which he performed the operation of version by Dr. Hicks's method. He had adopted it at Dr. Barnes's suggestion, who had kindly given his assistance. The operation succeeded very well so far as the turning of the child was concerned, and the circumstances were such that turning by any other method would have been impossible; but the difficulty afterwards experienced in extracting the child—the pelvic inlet being very greatly narrowed—was so great that it was necessary to perform the Cæsarean section.

Dr. Barnes called attention to the extreme value of the paper as tending to advance the cultivation of the hand as an obstetric instrument. The case described by Dr. Greenhalgh was one in which the advantages of Dr. Hicks's method of turning were most remarkably illustrated. The pelvis was so contracted that it was simply impossible to do more than squeeze the two fingers in between the tumour and the symphysis pubis; yet the turning was fairly accomplished, although for want of space it was still impossible to grasp the foot which had been brought down. He (Dr. Barnes) had performed the operation of turning about 110 times during the last five years, and he might say that in almost every instance he had derived more or less assistance from the adoption of the principle of this method. That principle consisted simply in acting upon the two poles of the long diameter of the fœtus at the same time. Just as in the case of a Chinese ball contained within another, if you pressed upon one point only, the inner ball would not revolve; but if you pressed upon opposite poles in opposite directions at the same time, the ball would revolve easily: so it was with the fœtus in utero. The general application of this principle in turning had been developed in his practice gradually as difficulties arose. He had first been led by Dr. Simpson's recommendation to use the right hand externally to support the uterus, and then he was not long in discovering that the hand outside might often be made more useful in effecting version than even the left hand inside. Thus he had for some years put in practical operation the bimanual method, and had frequently turned without introducing more than two fingers into the uterus. But he was glad to acknowledge that he had not fully grasped the principle of the operation, nor carried it into practice with entire comprehension and accuracy, until after reading Dr. Hicks's excellent description. It was right to refer to the history of this operation in reference to the researches of others. In 1807, Wigand published an admirable memoir, in which he fully described the principle and method of turning by internal and external manipulations. But this memoir has been unaccountably neglected. Although his name was quoted, what he had written appeared to have produced little or no effect upon practice. The memoir had, however, of late years been translated into French, and from that translation Cazeaux had largely quoted in his System of Midwifery. Martin, in 1850, and Esterle, an Italian professor, in 1859, since dead, appeared to have well understood the principle. But these and others generally preferred the cephalic version, and their writings, although quoted at times, had not influenced practice. In no text book, except Cazeaux's and Hohl's, was there any allusion to this improved method of turning. The speaker had acquired such confidence in its use, that, although he had been several times called in to exviscerate after other practitioners had spent many hours in vain attempts to turn, he had never yet failed to deliver by version, and he had not yet been reduced to the unpleasant necessity of exviscerating. One secret of success lay in obtaining an accurate idea of the position of the fœtus; and here he would say that there was no true transverse presentation such as was figured in many text-books. In all these cases the fœtus lay obliquely in reference to the pelvic brim; the head was never far remote from the os uteri, the breech was elevated to a higher level than the head, and the knees were generally near the lower segment of the uterus—not far to seek; so that by pushing the shoulder and head on one side, whilst the external hand pressed down the breech, the fingers passed through the cervix might easily seize one or other of them. There was one point in the operation which he did not think Dr. Hicks had described with sufficient care. As soon as the knee was seized, the mode of assisting by the external hand must be changed: at this stage the right hand should be brought down so as to receive the head in the palm, which should then be pressed upwards away from the brim and iliac fossa, whilst gentle traction should be exerted upon the limb grasped by the left hand. In this manner we had the full advantage of the principle of leverage upon the two extreme poles of the child, and the version is completed with remarkable ease. He had sometimes even been enabled by this manœuvre to elevate the head and shoulder from the brim in cases of extreme difficulty, so as to give space for the introduction of the hand, which was otherwise impossible. The obstacles to this method which he had found the most difficult to deal with arose in certain cases of dead children where decomposition had advanced so far as to destroy all elasticity and resiliency in the fœtal spine. Denman was, he believed, the first who clearly pointed out how the death of a child was *per se* a cause of difficult labour, and Hohl had very fully discussed this subject. To effect evolution by acting upon one or other of both poles of the long diameter of the child, it was essential that that long diameter—represented by the spine—should preserve a certain degree of rigidity or elasticity; otherwise, when traction was exerted upon a limb, the only effect was to compress the fœtus into a mass which moulded itself to the resisting structures. Another difficulty arose in cases of premature labour, partly from the small undeveloped condition of the uterus which impeded manipulation, and partly from the want of rigidity of the fœtus—also the result of immaturity—which led to its being compressed by the spasmodic contraction of the uterus into a compact ball. With regard to the use of this method of turning in placenta prævia, he fully recognized its merit. Although insisting upon the advantage of the principles of treating placenta prævia which he himself had introduced, he was always ready to avail himself, according to the necessity of the case, of other aids. The total detachment of the placenta was not true to physiology, it was bad in practice and quite superfluous; but the partial or cervical detachment was indicated, if for no other reason, to liberate the cervix and facilitate its dilatation, and therefore turning. As chloroform had been adverted to, he had one word to say upon that point. He fully recognized the value of this agent, and constantly derived signal advantage from its use; but the most positive experience had proved to him that unless full surgical anæsthesia were induced, it sometimes rather obstructed than facilitated turning. With regard to the objection that had been urged to the bimanual method, that it was liable to cause metritis, he could only imagine that this arose from an utter misconception of the nature of the operation. Inasmuch as it was only necessary to pass two fingers into the uterus, and the operation was accomplished with less force than by the old method—if violence had anything to do with causing metritis, the least violent proceeding must be the more free from that danger. So easy was it at times, that he had, on one occasion, in a case of placenta prævia, turned and delivered a child without passing more than two fingers into the vagina; he had not even turned back or soiled the cuff of his coat. In conclusion, he expressed his deep sense of the merit and usefulness of this memoir. He firmly believed that it would exercise an important influence in improving obstetric practice in this country.

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44. *Rectification of Face Presentation under Chloroform.*—MR. W. S. CARMICHAEL read before the Obstetrical Society of Edinburgh (April 29, 1863), the following communication: I attended Mrs. —— with her first child. On examination, the membranes were found entire, and the presentation not easily to be recognized. I suspected either face or breech. The labour was tedious. I left the patient for some time, and on my return found the membranes ruptured, and the face presenting. Mrs. ——'s general configuration, and examination *per vaginam*, by which I had found the pelvis narrow, with a hard projecting coccyx, led me to infer a tedious labour, dangerous at least to the child, if not to the mother. I therefore put her deeply under the influence of chloroform, and finding that I could without difficulty push the head above the brim of the pelvis, I was enabled to rectify the presentation. The labour thereafter was very tedious (in all 36 hours), so much so, that I had sent for the forceps; but, after waiting some time longer, delivery was accomplished naturally. The nose and both eyes clearly showed the presentation of the face. The urine required to be drawn off for a week, showing the great pressure exercised on the urethra, principally from the projection of the coccyx pressing the head against it. I think the case instructive, as showing that, by the use of chloroform, *administered deeply*, a presentation, rendering labour always tedious, and therefore dangerous to the mother, and of increased danger to the child, may by such means be safely rectified.

Professor Simpson remarked, that Dr. Carmichael's communication was a very important one. Rectification of face presentations had been the subject of a good deal of discussion at various times. We were taught by some authorities that face presentations could be readily converted, within the pelvic cavity, into head presentations, but it had subsequently been thought impossible as a general rule to do this, the mass turned (viz., the head of the child)